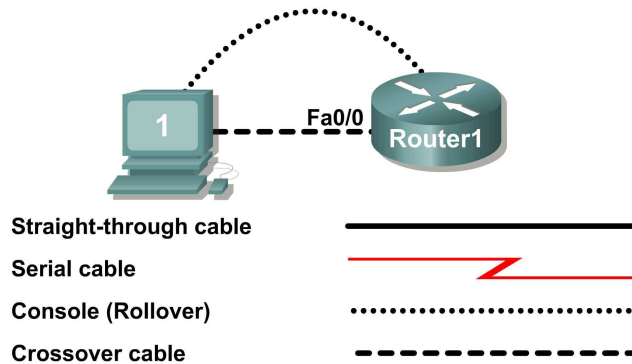


Lab: Managing Device Configuration

Topology Diagram



Task 1: Configure Network Connectivity.

Step 1: Physically connect devices.

Step 2: Logically connect devices.

Use IP addresses from the table to configure devices:

	IP address	Netmask
Host1	192.168.1.2	255.255.255.0
Router1	192.168.1.1	255.255.255.0

Step 3: Configure Router1.

Configure Router1. Configuration tasks for Router1 include the following:

Task- refer to Appendix 1 for help with commands
Specify Router name- <code>Router1</code>
Specify an encrypted privileged exec password- <code>class</code>
Specify a console access password- <code>cisco</code>
Specify a telnet access password- <code>cisco</code>
Configure the MOTD banner.
Configure Router1 interface Fa0/0- set the description set the Layer 3 address issue <code>no shutdown</code>

NOTE **DO NOT SAVE THE CONFIGURATION IN NVRAM.

Step 4: Verify connectivity.

Verify connectivity between host1 and Router1:

```
Router1# ping 192.168.1.2
```

Task 2: Use TFTP to Save and Restore a Cisco IOS Configuration.

Step 1: Start TFTP server.

Start the TFTP server by selecting **Start | Programs | SolarWinds | TFTP Server**.

Step 2: Configure the TFTP server.

To configure TFTP server, select menu option **File | configure**. Verify the following settings:

Setting	Value
TFTP Root Directory:	TFTP-Root
Security	Transmit and Receive Files
Advanced Security	All IP addresses
Auto-Close	Never
Log	Enable Log Requests to the Following File. Leave the default file.

Step 3: Save Router1 configuration to TFTP server.

a. From router console, begin a TFTP upload to the TFTP server:

```
Router1#copy running-config tftp:  
Address or name of remote host []? 192.168.1.2  
Destination filename [router1-config]? <ENTER>
```

b. Verify a successful upload transfer. Open Log file c:\Program Files\SolarWinds\Free Tools\TFTP-Server.txt. Contents should be similar to the following:

```
3/25/2007 12:29 :Receiving router1-confg from (192.168.1.1)  
3/25/2007 12:29 :Received router1-confg from (192.168.1.1), 1081 bytes
```

c. Verify the transferred file. Use Notepad to examine the contents of file c:\TFTP-Root\router1-confg.

Step 4: Restore Router1 configuration from TFTP server.

a. Verify that NVRAM is clear, then reboot Router1:

```
Router1# show startup-config  
startup-config is not present  
Router1# reload  
Proceed with reload? [confirm] <ENTER>
```

b. Connectivity must be reestablished with the TFTP server. Router1 fa0/0 must be configured with an IP address, and the interface enabled:

c. Verify connectivity between Router and host with the ping command

d. Download Router1 configuration file from the TFTP server:

```
Router# copy tftp startup-config  
Address or name of remote host []? 192.168.1.2  
Source filename []? router1-config
```

Destination filename [startup-config]? **<ENTER>**

e. View the configuration in NVRAM (startup-config) to verify an accurate transfer. The configuration should be the same as what was configured in Task 1, Step 3.

Appendix 1

Purpose	Command
Enter the global configuration mode.	configure terminal Example: Router> enable Router# configure terminal Router(config)#
Specify the name for the router.	hostname name Example: Router(config)# hostname Router1 Router(config)#
Specify an encrypted password to prevent unauthorized access to the privileged exec mode.	enable secret password Example: Router(config)# enable secret cisco Router(config)#
Specify a password to prevent unauthorized access to the console.	password password login Example: Router(config)# line con 0 Router(config-line)# password class Router(config-line)# login Router(config)#
Specify a password to prevent unauthorized telnet access. Router vty lines: 0 4 Switch vty lines: 0 15	password password login Example: Router(config)# line vty 0 4 Router(config-line)# password class Router(config-line)# login Router(config-line)#
Configure the MOTD banner.	Banner motd % Example: Router(config)# banner motd % Router(config)#
Configure an interface. Router- interface is OFF by default Switch- interface is ON by default	Example: Router(config)# interface fa0/0 Router(config-if)# description description Router(config-if)# ip address address mask Router(config-if)# no shutdown Router(config-if)#
Save the configuration to NVRAM.	copy running-config startup-config Example: Router# copy running-config startup-config Router#